

# **Massachusetts Water Resources Commission**

## **SPECIAL MEETING**

### **Meeting Minutes for January 29, 1998**

#### **Commission Members in Attendance:**

Mark P. Smith	Designee, Secretary of Environmental Affairs
Arleen O'Donnell	Designee, Department of Environmental Protection
Peter C. Webber	Commissioner, Department of Environmental Management
Joseph M. McGinn	Designee, Metropolitan District Commission
Jane Mead	Designee, Massachusetts Coastal Zone Management
Marilyn Contreas	Designee, Department of Housing and Community Development
Mark S. Tisa	Designee, Dept of Fisheries, Wildlife, and Environmental Law Enforcement
Lee Corte-Real	Designee, Department of Food and Agriculture
Richard J. Butler	Public Member
Bob Zimmerman	Public Member
Francis J. Veale	Public Member
Gary Clayton	Public Member
Jeffrey Kapell	Public Member

#### **Others in Attendance:**

Mike Gildesgame	DEM, Office of Water Resources
Richard Thibedeau	DEM, Office of Water Resources
Vicki Gartland	DEM, Office of Water Resources
Michele Drury	DEM, Office of Water Resources
Ellen Gugel	EOEA
Lou Wagner	Massachusetts Audubon Society
Lealdon Langley	DEP, WMP
Phillips Brady	Mass. Division of Marine Fisheries, Pocasset
Karen Pelto	DFWELE, Riverways
Ian Cooke	Neponset River Watershed Association
Michele Cobban Barden	Neponset River Watershed Association
Kate Stewart	Neponset River Watershed Association
Jenna Ide	Neponset Watershed Initiative
Mark Bennett	Conservation Law Foundation
Jonathan Yeo	MWRA
Gretchen Roorbach	MWRA
Carl H. Leone	MWRA
Richard Kleiman	MDC
Ken Fields	Boston Conservation Commission
Paul Diodati	Mass. Division of Marine Fisheries - Boston

Anthony Zuena	SEA Consultants Inc.
Paul Millett	SEA Consultants Inc.
Ellen Spring	EOEA
Brian Jones	EOEA
John Lipman	EOEA
Ernest T. Williams	DPW, Town of Canton
Fred Hanson	The Patriot Ledger
Steve Asen	DEM, Office of Water Resources
Ken Reback	Mass. Division of Marine Fisheries
Martin Pillsbury	MAPC
Joan Kimball	DFWELE, Riverways

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### ***Agenda Item #1: Introduction***

Mark P. Smith welcomed everyone and introduced the afternoon's agenda.

### ***Agenda Item #2: Vote: Adoption of the Minutes of December 11, 1997 Meeting***

Mark P. Smith noted that MWRA staff have requested a clarification of a statement made and recorded at the December meeting. Joe McGinn moved, seconded by Gary Clayton:

**To approve the meeting minutes of December 11, 1997 and to add the clarifying language, as an appendix, regarding the MWRA position that “nothing in the MWRA regulations requires partial user communities to develop local sources in stressed river basins or environmentally unsound locations.”**

The motion passed unanimously.

### ***Agenda Item #3: Vote: Canton Interbasin Transfer application (Well #9)***

#### **Review**

Mike Gildesgame reviewed the application process to date:

- Application received July 16, 1997
- Application declared complete November 20
- Public hearings in Boston and Canton during November
- Public comment period closed November 28
- WRC discussed the application at its December 11 meeting
- WRC vote had been scheduled for January 8 but was postponed by agreement until today's special meeting

Michele Drury reviewed the staff recommendation that the WRC approve the application with conditions and highlighted some of the main points of the recommendation.

- It provides for no net loss to the basin as a result of the operation of well #9 by requiring I/I reduction of 1:1 so that for every gallon to be transferred out of basin, one gallon is returned through reduced I/I;
- It uses 0.28 cfs as the minimum stream flow, a level that nearly doubles the year-round minimum approved by the WRC in 1991;
- It maintains minimum seasonal instream flows, thereby protecting median flow depths for the reintroduction of anadromous fish;
- It requires water conservation improvements by Canton

Ms. Drury reviewed the eight criteria for Interbasin Transfer Act approval and showed how Canton addressed each one. In addition, staff recommended additional conditions in order to fully meet the criteria and protect the Neponset River:

	APPLICATION MEETS?
<b>1. MEPA Compliance</b>	Yes
<b>2. Viable Sources</b>	With Conditions
<b>3. Conservation</b>	With Conditions
<b>4. Watershed Management</b>	Not Applicable
<b>5. Reasonable Instream Flow</b>	With Conditions
<b>6. Pumping Test</b>	Yes
<b>7. Local Water Resources Management Plan</b>	Yes
<b>8. Cumulative Impacts</b>	With Conditions

Conditions for Criterion 2 (Viable sources) include:

- additional information and finalization of a feasibility study for septic failure area for in-basin wastewater disposal options;

Conditions for Criterion 3 (Conservation) include:

- any cost savings from operation of the well shall go towards further I & I reduction, water conservation, etc.

Conditions for Criterion 5 (Reasonable Instream Flow) include:

- reasonable instream flows: this recommendation raises the minimum flow from its previous level of 0.15 cfs because of the concern of cumulative impact and it sets seasonal triggers

Other Conditions:

- the Town of Canton must meet with other towns in the aquifer recharge area and with the Neponset basin team to plan for future water needs

Ms. Gartland explained how the stream flow numbers for seasons were reached. The previously approved number of 0.15 cfs was nearly doubled to 0.28 cfs minimum year-round streamflow so that the cumulative impact will not have more than a 10 to 15 percent decrease in flow rather than a 27 percent impact as proposed. Seasonal flows (fall and spring) were incorporated so that sustainable median fall and spring flows, primarily for anadromous fish passage, are maintained with only a 10 to 15 percent impact to flow depth. Staff used the East Branch gauge to calculate streamflows which is considered a more conservative approach than the Norwood gauge. The recommended seasonal streamflows are:

- Spring (March 15 - June 15) 0.81 cfs
- Summer (June 16 - September 14) 0.28 cfs
- Fall (September 15 - November 15) 0.45 cfs
- Winter (November 16 - March 14) 0.28 cfs

After the staff presentation, Mark Smith noted that an issue had been brought to his attention regarding MDC's participation in the vote. He asked Joseph M. McGinn, the MDC designee to the WRC, to explain.

McGinn explained that an MDC Associate Commissioner (appointed by the Governor) serves as a selectman in the Town of Canton. As far as MDC has determined, there is no conflict of interest between McGinn's acting on behalf of the WRC and the MDC Associate Commissioner's position as selectman for the Town of Canton.

Mark Bennett of the Conservation Law Foundation asked to go on record stating that CLF is concerned that McGinn's participation amounts to an appearance of conflict of interest and asked that McGinn remove himself from the vote on Canton's well #9.

Commissioner Webber said he sees no apparent conflict since Mr. McGinn is appointed by the Commissioner of the MDC, not the MDC as a whole, and therefore Mr. McGinn's authority derives from the Commissioner, not the MDC as a whole or the Associate Commissioner.

A motion was made by L. Corte-Real and seconded by Richard Butler

**To approve the staff recommendation to approve Canton's interbasin transfer application for Well #9.**

Mr. Zimmerman stated that Canton has not met the requirements of the law (the eight criteria). He contended that the staff recommendation recognizes as much. He disagreed with staff that "all practical measures have been taken to retrofit public buildings with low flow devices" by Canton and offered photos of seven-gallon flush toilets with no toilet dams in public buildings (town hall, Ponkapoag, Boy Scouts building). Ms. Drury said some of these were removed due to operational problems for health and safety reasons. She said the information used by staff on this is from the MWRA. Zimmerman cited the criteria which says "all practical measures have been taken" and believes that conditions for all criteria should be met before approval, not as a condition of approval.

Mr. Kapell asked about the difference between meeting conditions before approval vs. operation. Mr. Gildesgame explained that in the past, applications have been approved before criteria were met, but were conditioned on meeting the criteria for compliance by specified dates. This application is treated the same as others have been in the past.

Mr. Zimmerman countered that there have been numerous violations of those conditions on some permits and that there has been no consistent enforcement.

Mr. Thibedeau responded that regarding criteria #3 (water conservation), Canton meets 90 percent of all criteria. It is a judgment call, according to Thibedeau.

Mr. Zimmerman's said that the purpose of this application is simply to save Canton money and that Canton doesn't need the water. Mr. Thibedeau said that nothing in criteria requires that a municipality has to need the water. Mr. Zimmerman noted that Brockton was denied an approval even though the WRC noted that Brockton did a good job of water conservation. Thibedeau recalled that the impact to Pine Brook would have been far greater than the proposal here for the East Branch of the Neponset. Mr. Smith explained that the crux of this vote should hinge on whether or not the recommendation is protective of stream flows, and if it is, then the WRC should vote to approve it.

Mr. Tisa expressed concern about the staff recommendation regarding recommended stream flows. He and DMF are not confident that the recommended flows are protective of anadromous fish resources. Tisa expressed concern about the phrase "protective flows" as used by Smith. Protective of what? There are many different standards: water quality, biological resources, aquifer yield, etc. There is no exact quantitative model of what will happen to anadromous fish populations with a 10 to 15 percent reduction; that is, the corresponding percentage drop in fish population or other factors that may result is unknown. Further, he stated that given the already stressed nature of the basin it is not known what this withdrawal may do. The effect on resident fisheries and invertebrate populations is also a question. The key is that this is already a stressed basin.

Mr. Tisa's second concern is the total cumulative impact. Aquatic resources are balanced "on a knife's edge" in the Neponset, a stressed basin. There is such a close margin in this case and no one knows for sure what will happen.

Third, monitoring is a concern. There is no requirement in the recommendation for monitoring of the resource (fish) itself and no condition to cut back on pumping if an impact to the resource is found. But even if monitoring requirements were in place, lack of enforcement is a concern.

Frank Veale expressed concern about water quality and dilution needs. He asked if this is creating poorer water quality overall by withdrawing this water and notes the need for dilution of non-point source pollution.

Jane Mead asked if staff considered the wetlands impact from South Walpole to Dorchester. The Fowl Meadow already has a phragmites invasion; any additional stress adds to a phragmites problem. Vicki Gartland responded that the recommended streamflow is well above low flow conditions.

Arleen O'Donnell said she could support this application if there is a net environmental benefit to the basin, but that I/I reduction at a 1:1 ratio does not go far enough. Brockton was required to achieve 3-to-1 and there was another precedent for 2-to-1. These previous approvals require that the water be deposited into a water bank before withdrawals are made.

DFW's recommended streamflow number is 0.39 cfs which is based on median monthly streamflows. The more stringent number would change the frequency of withdrawals as shown in the box.

Average year shutdown		
	Staff recommendation	DFW recommendation
Summer	34%	49%
Fall	32%	57%
Winter	4%	6%
Spring	15%	52%

DMF staff explained that median monthly flows were chosen in the absence of modeling data, using the data from 1939 to 1996 at Norwood (historic flow) and from 1952 to 1997 at Canton (record median flow). They note the USFW technique is base flow methodology with no withdrawals below the monthly median flow.

Ms. O'Donnell asked about the 10 to 15 percent reduction. The recommendation requires certain actions once a 15 percent reduction in streamflow is reached, but would like to see additional requirements once 10 percent is reached, perhaps a throttle back requirement. She further suggested a greater than 1:1 net return to the basin, but allowing the town the flexibility to achieve that with additional recharge options other than I/I reduction, including stormwater recharge.

Mr. Zimmerman cited a letter from the Conservation Law Foundation in which CLF names several examples of how Canton has not met criteria #3 (water conservation). Zimmerman reiterated that the Town of Canton has not met the criteria, will not save money; does not need the water, and that it is inappropriate for the WRC to craft conditions to this application to try to prevent damage and not allow WRC and agencies the time to review the amendments. He urged the WRC to deny the application.

Mr. Clayton expressed reservation over the process of amending the motion/application. He is also opposed to the idea that conditions can be met after vs. before the permit is approved.

Jeff Kappell felt that concerns fall into three classes. (1) The alternate interpretations of the law regarding whether conditions need to be met before or as a condition of approval; (2) Whether the conditions are adequate, and (3) Whether the conditions are enforceable. Mr. Kapell said he is troubled by the first class of concerns as the enforcement can be fixed; Mr. Clayton expressed concern about the latter.

Mr. Zimmerman wanted stormwater remediation and I/I reduction first to see if it works before WRC approves the application. He wants the data first.

Mr. Zimmerman and Mr. Clayton both cite poor enforcement in the past. Clayton noted that public comment during this application process notes poor enforcement of other approvals. Zimmerman says that Natick has overpumped by as much as 1 mgd.

Commissioner Webber suggested that a way to gain confidence is to require conditions to be met sequentially. That is, to require some conditions before drilling the well, others before putting the well online, etc.

Mr. Zimmerman noted that the WRC approved a Duxbury application with conditions and after Duxbury implemented the conditions, they didn't need the new well.

Ms. O'Donnell moved, with a second by Mr. Kapell:

**To amend the main motion as follows:  
(Reading from the Summary of the WRC Staff Recommendation, January 29, 1998)**

**Point A.1. second sentence revised to read "This must occur before Well #9 is installed."**

**Point A.2. second sentence revised to read "The plan must be approved by the WRC after well #9 is installed but prior to the well being pumped."**

**Point B.1. second sentence revised to read: "The plan must be approved by the WRC before the well is installed."**

**Add Point B.7. to read "In addition to the 1:1 reduction, the Town of Canton must submit a plan for offsetting total withdrawals by 2:1, by a combination of measures such as I/I reduction, stormwater recharge and wastewater recharge. Said plan shall be approved by the WRC prior to the installation of the well."**

**Point C.2. fifth sentence revised to read: "A streamflow monitoring plan must be approved by the WRC before any water is pumped from Well #9, and should . . . ."**

The motion was unanimously approved.

Mr. Tisa moved, with a second by Mr. Clayton:

To amend the main motion as follows:

**To substitute DMF thresholds for streamflow values in the staff recommendation, as follows:**

<b>0.39 cfs</b>	<b>Nov 16 - Mar 14</b>
<b>2.02 cfs</b>	<b>Mar 15 - Jun 15</b>
<b>0.39 cfs</b>	<b>Jun 16 - Sep 14</b>
<b>0.62 cfs</b>	<b>Sep 15 - Nov 15</b>

Ms. Gartland explained that calculations show the spring numbers result in only a 3 percent reduction of streamflow, leaving 97 percent for instream uses, as opposed to the 10 to 15 percent

reduction. The WRC has always interpreted “reasonable” to achieve a balance between water suppliers and fish which is why 10 to 15 percent was used. Mr. Tisa countered that in this case, the East Branch of the Neponset is already out of balance because it is a stressed basin.

The motion failed with 4 in favor and 8 opposed.

Mr. Tisa suggests that in the absence of passage of his amendment, the monitoring requirements in the main motion do not go far enough to protect aquatic resources. There are no requirements for monitoring of fish population estimates, temperature, dissolved oxygen levels, etc.

Commissioner Webber was hopeful because the motion does establish new precedents in the direction of greater resource protection. He notes significant progress today.

**The main motion made by Mr. Corte-Real and seconded by Mr. Butler passed, as amended, by 8 in favor and 4 opposed.**

Mr. Smith moved, with a second by Ms. Contreas, that:

**Pursuant to Executive Order 385, “Planning for Growth”, the WRC finds that this decision is consistent with the Executive Order and that it minimizes unnecessary loss or depletion of environmental quality through the conditions of approval that require water conservation and reduction in inflow and infiltration in its wastewater collection system.**

The motion passed with 8 in favor, 2 opposed, and 2 abstentions.

***Agenda Item #4: Future requirements for applications under the Interbasin Transfer Act***

Mr. Smith moved, with a second by Mr. Veale, that:

**The WRC intends to adopt a requirement that all future applications under the Interbasin Transfer Act shall meet certain performance standards related to the eight criteria under 313 CMR 4.05 prior to the application being deemed complete.**

**These performance standards should include measures such as: standards regarding reductions in inflow and infiltration in wastewater collection systems, WRC water conservation standards (such as gallons per capita use and unaccounted-for water), and sampling standards to provide a baseline for water-dependent resources, such as aquatic habitat, fisheries and wetlands.**

The motion passed unanimously.

***Agenda Item #5: Reporting and Enforcement Guidelines***



Ms. O'Donnell moved, with a second by Mr. Zimmerman, that:

**The WRC requests that DEM and DEP develop and submit guidelines to ensure compliance and enforcement of projects involving both Interbasin Transfer Act approval and a Water Management Act permit.**

The motion passed unanimously.

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EG/MG